R E P O R T R E S U M E S

ED 015 536 EA 000 948

ORGANIZATIONAL RESISTANCES TO INNOVATIVE ROLES IN EDUCATIONAL ORGANIZATIONS.

BY- SIEBER, SAM D.
COLUMBIA UNIV., NEW YORK. BUR. OF APPL. SOC. RES.

PUB DATE SEP 67

EDRS PRICE MF-$0.25 HC-$1.36 32P.

DESCRIPTORS- PUBLIC EDUCATION, *ORGANIZATIONS (GROUPS), *TEACHER ROLE, *EDUCATIONAL INNOVATION, SCHOOL COMMUNITY RELATIONSHIP, SYSTEMS CONCEPTS, EDUCATIONAL OBJECTIVES, EDUCATIONAL CHANGE, TEACHER ADMINISTRATOR RELATIONSHIP, TEACHERS, *DIFFUSION, PARENT ATTITUDES, STATUS, STUDENT TEACHER RELATIONSHIP, TEACHING STYLES, BUREAUCRACY, EDUCATIONAL STRATEGIES, *CHANGE AGENTS, PORTLAND,

FOUR MAIN ASPECTS OF THE PUBLIC EDUCATION SYSTEM LIMIT THE APPLICATION OF DIFFUSION RESEARCH FROM OTHER SOCIAL SYSTEMS (MEDICINE, INDUSTRY, AND AGRICULTURE) TO THE FIELD OF EDUCATION--(1) BECAUSE OF SCHOOL SYSTEM VULNERABILITY, CHANGES THAT RUN THE RISK OF DISTURBING THE LOCAL COMMUNITY ARE ESCHEWED, INNOVATIONS THAT ARE PERSUASIVELY PUBLICIZED ARE LIKELY TO BE ADOPTED WITHOUT SUFFICIENT EVALUATION, AND EDUCATIONAL EXPERIMENTATION IS LIMITED, (2) BECAUSE OF QUASI-PROFESSIONALISM, TEACHERS ARE INCLINED TO RESIST INNOVATIONS, WHETHER PROPOSED BY ADMINISTRATORS, CONSULTANTS, OTHER TEACHERS, OR LAYMEN, (3) BECAUSE OF GOAL-DIFFUSENESS, TEACHERS TEND TO STRESS INSTRUMENTAL OR LEARNING-PROCESS GOALS WHILE PARENTS DESIRE STRESS ON SUBSTANTIVE AND TERMINAL GOALS, AND (4) BECAUSE OF FORMAL CONTROL WITHIN THE EDUCATIONAL ORGANIZATION, DEVIANT OR INNOVATIVE BEHAVIOR BY TEACHER MEMBERS OF THE SYSTEM IS SERIOUSLY LIMITED. THESE FOUR VARIABLES ARE CONCEPTUALIZED IN A MODEL THAT INCORPORATES 28 INTERRELATED STRUCTURAL SOURCES OF RESISTANCE TO EDUCATIONAL INNOVATION. A NEW "STATUS OCCUPANT" STRATEGY, EMPHASIZING THE ROLE OF THE TEACHER AS INNOVATOR, IS PROPOSED FOR INDUCING EDUCATIONAL CHANGE. BY INCORPORATING THE POSITIVE FEATURES OF THREE EXISTING STRATEGIES (RATIONAL MAN, COOPERATOR, AND POWERLESS PARTICIPANT), THE NEW STRATEGY SEEKS TO OVERCOME DIFFICULTIES ARISING FROM THE DOMINANT LOCAL, NATIONAL, AND ANCILLARY ORGANIZATIONAL PROPERTIES OF EDUCATION. THIS PAPER WAS PREPARED FOR THE UCEA CAREER DEVELOPMENT SEMINAR, CO-SPONSORED BY THE UNIVERSITY COUNCIL FOR EDUCATIONAL ADMINISTRATION AND THE UNIVERSITY OF OREGON (17TH, PORTLAND, OREGON, OCTOBER 22-25, 1967). (JK)

ED015536

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ORGANIZATIONAL RESISTANCES TO INNOVATIVE ROLES IN EDUCATIONAL ORGANIZATIONS *

Sam D. Sieber

Bureau of Applied Social Research
Columbia University
September, 1967

* Prepared for the University of Oregon-UCEA Career Development Seminar, Portland, Oregon, October 23-25, 1967.

EA 000 948

Organizational Resistances to Innovative Roles in Educational Organizations

In approaching the topic of educational diffusion and innovation, we are sorely tempted to reverse the usual order of presentation wherein the plea for further research is relegated to a concluding section. For the paucity of relevant research in this field renders anything we might say on the subject highly speculative. If the participant in this conference comes away with any lasting impression, therefore, it should be an impression of our shared ignorance rather than of our fragmentary wisdom.

It is true that a large literature on diffusion exists in scientific and technical fields, such as agriculture, medicine, the behavioral sciences and industry (Rogers, 1962; Paisley, 1965). But the findings of these fields have very limited application to education, for reasons that we shall presently discuss. Further, the studies conducted under the inspiration of Mort at Teachers College (Ross, 1958), comprising the bulk of diffusion research on education, tell us virtually nothing about concrete processes and hindrances to change. And there are indications that even the findings about diffusion rates that were produced by this tradition have been out-dated by recent acceleration in the production and distribution of educational ideas. Such factors as the Cold War and the National Defense Education Act, the explosion of knowledge and expansion of the knowledge industry, community pressures for greater efficiency in education fostered by the baby boom, building shortages, and higher tax rates, and

changing occupational patterns have created great ferment in education (Miller, 1967). These trends have pressed for faster adoption of new ideas and practices; and the new R & D structures have provided facilitative mechanisms (Sieber, 1967). Under the circumstances, it seems likely that the historical lag between invention and adoption has been substantially reduced.

Several authorities have even claimed that a new problem has emerged in many schools -- the problem of <u>too hasty</u> adoption. Grobman, a participant in the Biological Sciences Curriculum Study, has stated:

> ...some of the curriculum ideas have had more of an impact that I would have liked to see, since I think there has been over-hasty adoption in a 'bandwagon' or desperation attitude of many curriculum innovations, in contrast to the generation it has taken to bring about change in the past. At the moment, it seems to me quite clear that innovation is having an impact, and the pressing problem is how do we direct the impact and how do we assess it? (Miles, 1965, p. 2).

The chaotic character of educational change today has been abetted by crisis-oriented legislation at local and federal levels. Despite the fact that most professional educators, owing to their own crisis-orientation, warmly endorse this trend, the outcome is a myriad of educational fads whose sole virtue is often political. The best ideas and practices are easily lost in the stampede.

And yet, who is carrying out research on the causes and effects of over-diffusion and of uncritical adoption, or on the best means for "directing the impact" on a national scale? Or, for that matter, who is even attempting to describe the national network of diffusion in a systematic, empirical fashion? The strategy and findings of Mort's research seem oddly irrelevant in our new era of educational change. One would prefer to ask the professors who recommended the "best practices" that

were included in Mort's Adaptability Scale how they arrived at their judgments, rather than to appraise the up-to-dateness of an educational program by the number of such innovations claimed by the school. In these times, the latter strategy might be better suited to appraising the amount of anarchy in many schools.

Inasmuch as the research on educational diffusion and development has fallen behind the times, the best that can be done at this stage is to offer a set of perspectives based on heuristic assumptions of fact in the pious hope of stimulating research.

Distinctive Features of the Educational System*

There are four aspects of our public educational system that ought to be given more attention in seeking to understand processes and outcomes of change, and which, when taken together, distinguish education from the social systems of medical practice, industry, and agriculture. Because of these distinctions, the applicability of diffusion research in these fields to educational structures is severely limited. These aspects are the following: vulnerability to the social environment; the professional self-image and associated values of educational personnel; the diffuseness of educational goals; and the need for coordination and control of the primary clientele as well as of the employees of the system. We view education, then, as a vulnerable formal organization with diffuse goals whose functionaries are quasi-professionals, and which is devoted to processing people within its boundaries. The

---

*We owe a greater debt to three writers on this subject than can be signified in specific references in footnotes. They are: Bidwell, 1965; Miles, 1965; and Wayland, 1964, 1967.

implication of these features for diffusion and innovation are tremendous, but seem to be inadequately recognized by researchers and practitioners alike. In the discussion that follows, I will first indicate how these aspects of the system frustrate the current tactics of rational planning, and then briefly suggest how these same aspects might be exploited by means of alternative approaches.

Vulnerability

The vulnerability of a social system refers to the extent to which the system is subject to powerful influences from its environment. From the standpoint of the organization, the danger of vulnerability is that these influences might be exerted irrespective of the goals znd resources of the system. If external pressures were wholly compatible with the goals of the system, and resources were adequate to attain these goals, the system would be in perfect harmony with its environment. Vulnerability, in the sense of exposure to untoward influence, would not be at issue. A high degree of vulnerability, therefore, is denoted by three conditions: (1) subjugation to the environment, (2) discrepancy between the demands of the environment and the goals of the system, and (3) inadequate resources for achievement of system-goals.

While most organizations are occasionally vulnerable in this sense, owing to periodic maladjustments between powerful external demands and organizational results, the educational system is especially prone to such maladjustments. This tendency arises from trying to fulfill the distinctive functions of education in a rapidly changing social order -- the functions of socializing and training recruits in fundamental ways, and of allocating them to adult roles. The socialization-training

function is made problematic by the accelerated expansion of knowledge and skills required by the society and by major shifts in value systems, which trends produce a recurring lag between the output of the educational enterprise and the potential inputs (knowledge, skills, values). The fulfillment of the allocation function is frustrated by changes in occupational patterns, and by increasing urbanization and leisure time. In sum, transformations in both the structure of adult roles, and in the knowledge and skills required to fill both old and new roles, place great strain on the educational system. It is small wonder, then, that education is frequently accused of "falling behind the times."

Evidence of goal-conflict between school and community is afforded by a recent study conducted by the Bureau of Applied Social Research, which shows that most parents do not share the educational goals of their children's teachers. In a study of mothers from all types of backgrounds and communities, it was found that fifty-six per cent espoused a goal for the local school that was different from the goal expressed by the teacher of their children.*

The ability of an organization to mobilize resources for the attainment of goals also affects vulnerability. For without the needed resources, the organization loses the initiative for directed change in conformity with its own goals, and must rely more heavily upon conditional hand-outs from the environment. (Ear-marked funds from the federal government is a good example of what we have in mind when we use the phrase conditional hand-out.) We therefore need to examine the resource level of the system in assessing its vulnerability.

---

*From a forthcoming project report by David E. Wilder, et al.

The increasing democratization of education, reflected in desegregation, emphasis on comprehensive schools, and reduction in the high school drop-out rate, means that the system is obliged to deal with a growing percentage of the school age population from increasingly diversified backgrounds. Thus, between 1947 and 1964, the proportion of 16 and 17 year olds who were enrolled in public schools jumped from 68 per cent to 88 per cent (U. S. Dept. of HEW, 1965, p. 118). Add to this trend the large-scale shifts in population and the continued reliance upon an outmoded financial structure (Conant, 1967), and it becomes apparent that the educational system is suffering from internal problems of mobilizing resources at the same time that it is confronted with urgent demands from society at large. Moreover, because education is both highly bureaucratized and formally decentralized, it is difficult to adjust the machinery to new demands fast enough to satisfy their proponents. Education of the disadvantaged has been a national theme for several years, for example, but there are still virtually no teaching training institutions with special programs for teachers who plan to work in lower class neighborhoods.

The case for vulnerability must not be overstated, for school personnel are often adept in manipulating public opinion and in evading scrutiny; and the parent's anticipation of being "cooled out" may often discourage them from complaining. But the local public is not the only source of pressure and influence. Wayland (1964) has stressed the existence of a national system of agencies concerned with education, or ancillary structures, that frequently dominate decisions at the local level. The teacher training institutions, the professional associations,

the accreditation associations, the examination systems, the textbook publishers, federal and state agencies, and by no means least, the requirements of colleges and technical schools -- all of these agencies belong to a national network of communication and power, and their influence reaches into every local district. In most communities this national system reduces local control of education to a mere shadow of its ideological intent.

In sum, the gap between social demands and the activities and outputs of the system is substantial, and has been enlarged in recent years owing to several factors. Consequently, the goals and accomplishments of the educational system have failed to gibe with the expectations held by powerful sectors of the environment; and these sectors have therefore redoubled their efforts to dictate school practices, or at the very least to press the schools to display tokens of progress. The end result is that schools have found it increasingly difficult to seize the initiative for innovation.

There are several specific implications for innovation of the vulnerability of school systems.

First, changes in practice that run the risk of disturbing the local community are eschewed. This response is quite evident in the instance of school board members. Gallup asked a national sample of school board trustees to estimate how much difficulty would be entailed in introducing thirteen selected practices into their schools (Gallup, 1966). The four practices most often regarded as "very difficult" were innovations that threatened the values or life styles of the community: a pass or fail grade to reduce classroom competition, which runs counter

to the ideology of competition as a mainspring of effort, would make it difficult for graduates to get into college, and would fail to inform parents of their children's progress; reduction of summer vacation to four weeks, which would interfere with the vacationing habits of parents; a nationally standardized high school test for seniors, which raises the spectre of formal, national control over local standards and practices; and an extension of the school day by one hour, which would be costly and would reduce the amount of time available for extra-curricular activities, especially athletics. The wisdom of imputing fear of community reactions to the board members is borne out by the fact that these four innovations were precisely those most often considered "a poor idea" by the parents in the same communities as the board members in Gallup's survey.

In essence, under conditions of extreme vulnerability, political feasibility might carry greater weight in determining the adoption of certain innovations than educational value. The new practices imported into the schools tend to be the more innocuous ones, or watered-down versions of major innovations, or outright services to the community.* The strategy of adopting non-disruptive practices has the effect of neutralizing elements in the community that favor radical change by offering tokens of progress.

---

*Evidence of the differential response to a practice that threatens the community versus a practice that serves the community is afforded by Allen. Comparison of the diffusion rates of driver training (a service) with the idea of pupils studying the community (a threat) showed that driver training was adopted by 90 per cent of the schools in 18 years, while community-study required 60 years to reach this level of adoption. (Allen, 1956; cited in Rogers, 1962, p. 41).

Another consequence of vulnerability is that innovations that are persuasively publicized become candidates for adoption, regardless of their educational significance. Miles (1965) cites the example of new mathematics programs:

> The power of the mass media in this respect was illustrated last year (1963) by the demand placed on school boards and school personnel for new mathematics programs after Look magazine had carried a feature story on the new mathematics.

The phenomenal increase in enrollment in new mathematics courses after Sputnik (an increase of 595% between 1948-49 and 1962-63) was widely sustained by public opinion. While we might be inclined to applaud this particular innovation, the same pressures apply to a range of more controversial practices; and in the climate of educational criticism that prevails today, it is not unusual for practices to be urged upon the school irrespective of the needs of the district. Illustrative of irrelevant pressures for innovation are the results of a content analysis of the published platforms of ten candidates for a school board in a relatively well educated suburban district (Kerr, 1964, p. 43). Out of a total of fifteen specific educational practices recommended by the candidates (omitting financial matters) twelve were already in operation in the system. Moreover, the candidates failed to mention a host of innovations that the schools had not adopted. These omissions, and the irrelevancy of the stated recommendations, suggest that the candidates' ideas were gleaned randomly from popular literature. To the voting public, who seemed to be only a little worse informed about the schools than the candidates, the irrelevancy of the candidates' recommendations was by no means apparent.

When publicity for an innovation is translated into legislation, questionable innovations may be locked into school systems for several years with little hope for honest assessment. Thus, Cronbach has pointed out:

> There is no evidence to justify...the California legislation that requires instruction in foreign language in grades six to eight; the assumptions used to justify the requirements are untested and, with the law now a fait accompli, no one is about to test them. The energies of the people who might be giving thoughtful attention to language instruction are diverted into a crash program to write curriculum materials and train teachers (Cronbach, 1966, p. 7).

The vulnerability of the system also affects internal relationships in a fashion that reduces serious educational experimentation. An organization that is subject to control by a local constituency, and whose activities are visible (by virtue of the fact that its clientele move in and out of the system every day), requires a high degree of consensus on goals and procedures in order to present a united front. Lacking such consensus, the organization's leaders must insist on a certain measure of secrecy. These conditions might promote dominative relationships between administrators and teachers, and also strong informal control among teachers, that might tend to countervail the exercise of professional discretion. Thus, radical departures from typical classroom practices are subtly discouraged lest parents make invidious comparisons with other staff members. The same kind of restraint probably acts upon principals, and perhaps even upon higher administrative personnel.* In short, caution might be generated within the school apart

---

*It seems clear, for example, that the resistance of school superintendents to national testing programs stems from apprehension over the public's penchant for invidious comparison among districts.

from anticipation of either support or condemnation by the community. Efforts that are exerted beyond the call of duty by an individual practitioner might be viewed with apprehension because they threaten to raise community expectations for other staff members. Restriction of productivity on the part of industrial workers due to vulnerability to shifting standards of performance has been an object of study for almost forty years. Presumably the assumption that teaching is a profession has prevented us from examining teachers in the same light.

Vulnerability to national ancillary structures also has its consequences for innovative roles. As serious as the problem of resistance to new practices undoubtedly is, an equally serious problem is excessive diffusion. Hearing as much as we do about the urgent need for dissemination of new ideas and practices, one would think that there were no professional journals, mass periodicals, newletters, syllabi, in-service courses, consultants, accreditation teams, textbooks, curriculum committees, publishers' representatives, conferences, summer course work, or new teachers entering the system fresh from education courses. Many of our school that are swamped with innovative ideas might consequently lose all discrimination. Considerable disagreement among staff members regarding the allocation of resources to different innovations might be a further consequence. In many schools, excessive diffusion might produce constant dither over the best means of keeping up to date, leading to the try-out of one fad after another. Finally, it would be interesting to know whether this climate of competing interests and information sources produces a debilitating ambivalence or even cynicism, as sometimes claimed; and [redacted] further, whether these circumstances reenforce the importance of local

political feasibility as an adoption-criterion. The research on these questions remains to be done.

Quasi-professionalism

A second major aspect of educational systems is the self-image of professionalism held by school personnel. Members of occupations that are commonly regarded as "professions" are characterized by three features: (1) they perform a personal service; (2) they possess a high degree of technical competence, and (3) they enjoy considerable autonomy in their work. It cannot be denied that teachers are performing a service, but there is substantial doubt that they exhibit the remaining features of professionalism. With respect to autonomy, Brickell has described working conditions as follows:

> ...the teacher is not an independent professional, not a private entrepreneur free to alter his working situation when he chooses -- not free to decide what he will teach to whom at what time and at what price. He is instead a member of the staff of a stable institution (Brickell, 1961, p. 19).

There are also certain attributes of the teaching force that distinguish the occupation from recognized professional groups. The overwhelming proportion are women; they are heavily recruited from the middle and lower-middle classes; the lower half of the ability continuum falls far below the average for other professions; only about half of secondary school teachers and one quarter of elementary teachers have any training beyond college; salaries have failed to compete favorably with salary ranges in occupations requiring equivalent levels of preparation; teaching stands at the bottom of the professions in prestige; and occupational commitment is extremely low, as revealed by the fact that most teachers do not expect to remain in teaching until retirement, and only a small proportion of those

who receive teacher training remain in the occupation longer than ten years (Jessup, 1967). For all of these reasons, teaching might be characterized as a quasi-profession. It appears, nevertheless, that teachers adopt the full-fledged professions as their reference groups, rather than other quasi-professions such as nursing and social work. This institutionalized gap between social reality and the aspirations of teachers has several implications for innovative behavior.

In the first place, the quasi-professional status of teaching induces apprehension toward actions that are designed to improve performance, because it is feared that such actions will enlarge the discrepency between real status and level of aspiration. Innovations that are proposed by the administration are often resisted because they imply further restrictions on "professional" autonomy. Even expert consultants from outside the district are sometimes rejected because they threaten the teacher's insecure self-image as an "expert" in her own domain. In brief, teachers are anxious to preserve the modicum of authority, expertise, and social standing that they possess, and might therefore reject administrative efforts despite the possibility of better serving educational needs.

Similar treatment might be accorded the innovative ideas of laymen. The situation might be more stressful for teachers than for other quasi-professionals because of the vulnerability of the organization. Thus, many parents do not hesitate to propose changes in the school because they possess legitimate control over the organization. No doubt, teachers have developed a repertoire of "cooling out" techniques for dealing with laymen; by such means, worthwhile ideas for improving the instructional program might be rejected by teachers simply because they issue from laymen.

The insecure professional self-image of teachers might also account for a tendency among teachers to avoid informal communication on matters of teaching and learning. Extensive personal observation of faculty rooms suggests that informal discussion of classroom practices is minimal. Further suggestive evidence comes from a survey that requested teachers to nominate practices they knew about that might contribute to the mental health conditions of pupils (Lippit, 1965, pp. 17-18). Out of a total of 330 practices that were mentioned, only 30 came from knowledge of what other teachers were doing -- the overwhelming majority were practices that the teachers themselves were following. The researcher concluded, "People usually do not know what other people are doing within their school buildings." Concealment of an inadequate base of knowledge and a limited set of skills might be necessary to permit quasi-professionals to preserve their professional identity. Such behavior might be especially appropriate when it becomes a matter of revealing classroom difficulties to other teachers. Advice might be least often sought, therefore, on precisely those problems that are most critical.

Still another possible consequence of status-insecurity is that energies that could be devoted to educational experimentation are channeled into status-enhancement activities, especially through participation in the local teachers' association or union. Corwin has shown that the more professionally oriented teachers are more likely to exhibit militancy (Corwin, 1965). and my own field observations of the behavior of teachers during a period of incipient unionization demonstrates that instructional responsibilities are readily displaced by involvement in organizational protest.

The rejection of bureaucratic incentives for greater effort is another consequence of the professional self-image bearing on innovative behavior. Professional esteem rests upon two bases: unstinting service to the individual needs of clients, which depends upon a large measure of privatized discretion, and recognition among colleagues. In contrast, formal incentive systems related to performance rest upon observable behavior, and also shift control from colleagues to administrators. In other words, incentive systems violate the core values of professionalism. Thus, local merit plans are opposed as at once undermining colleagial authority and violating the privileged nature of the professional-client relationship.

A final consequence of quasi-professionalism needs to be examined. Because the claim to professional status rests most firmly on the service-orientation of teaching, this aspect of the teaching role might receive disproportionate emphasis, either through selective recruitment to the occupation of people-oriented individuals or through compensation on the part of those already in the occupation. Research tends to indicate that the teacher-pupil relationship is the most important source of occupational gratification for teachers. Neither expertise (teaching skills and knowledge of subject-matter) nor independence from supervision can compete with service to clients as a source of satisfaction. One effect might be that teachers are "captured" by their clientele, especially through contacts in extra-curricular activities. Gordon (1957) has shown that such contacts make it easier for students to manipulate the behavior of teachers with respect to grading.

Since students are involuntary participants in the organization, emphasis on the affective-particularistic aspect of the relationship with students affords an alternative to technical expertise as a means of controlling and motivating students. And this emphasis also serves to legitimate the demand for greater discretion and autonomy. Because it is presumed that many students are unique and must be dealt with on their own terms, and that every classroom is different from every other classroom, it becomes bootless to suggest innovations that were developed for other students in other classrooms. In effect, the intimacy of the teacher-student relationship spurns the advice of outsiders. This state of affairs might explain the situation observed by Lippitt:

> We find in teachers a resistance or an inhibition to adopting another teacher's inventions. This is quite different, we find, from the active scouting for the newest in some of the other fields. Our interviews seem to suggest, for example, that the idea of adopting somebody else's practice somehow is a notion of imitation and that as such it is bad. (Lippitt, 1965, p. 13).

Goal-diffuseness

A great deal has been said about the difficulty of specifying the multiple goals of education and of measuring their attainment, especially the long-range socialization goals. Goal-diffuseness refers to this lack of clarity and focus among organizational goals.

The diffuseness of educational goals reinforces the effects of vulnerability and of status-insecurity on the emergence of innovative roles. Because it is difficult to adduce evidence for the effect of an educational practice, it is often hard to oppose the naive demands of laymen, or to sell innovations to the public that are thought by educators to be of special value. With respect to the national system of

professional influence, problems of evaluation make it difficult to sort out the chaff from the grain, leaving practitioners exposed to the blandishments of educational hucksters; and so the problem of over-diffusion and uncritical adoption arises. Finally, the diffuseness of goals facilitates the illusion of consensus between school personnel and the public, which permits conflict to develop over the instrumental goals of the school and community.

Instrumental goals, as contrasted with terminal goals, arise from a multitude of adjustments to problems that are confronted by the schools, on the one hand, and by the community, on the other. For example, as mentioned earlier, many teachers find it expedient to emphasize the nuturant aspect of their relationship with students in order to preserve their professional identity, to motivate students as individuals, and to avoid a hardening of the anti-scholastic student subculture. According to a recent study of preferred teaching styles, 62 per cent of the teachers described themselves as pursuing a permissive, discovery-oriented style and 90% of the principals preferred this style (Sieber and Wilder, 1967). But parents are evidently more concerned with the substantive and the authoritarian aspects of instruction. Only 30 per cent of the mothers preferred the permissive style. A large minority of the working class parents were concerned about classroom control, and large proportions of both working- and middle-class parents were concerned about adequate coverage of subject matter and regular testing of progress. These emphases reflect the instrumental goals of parents who are interested in instilling discipline and in preparing their children for college or for employment. Stated in terms of consensus on teaching styles, more than two-thirds of

the mothers had a teacher for their child whose self-description was not in accord with the mothers' preferences.

Earlier we mentioned that fifty-six per cent of the mothers disagreed with the terminal goals of the teacher. It therefore seems that terminal goals elicit more consensus than instrumental goals. This might be a consequence of the lack of clarity in terminal goals, which permits verbal agreement despite fundamental differences in outlook. Further, disagreement on terminal goals is less disturbing to parents than disagreement on instrumental goals. The mothers in our study were much more likely to be dissatisfied if they felt that the teacher was not complying with their role-expectations than when they felt that the school did not share their goals.

If the terminal goals of education were more clear-cut, parents and educators could probably come to a better understanding of what is expected in the classroom. Under present circumstances of goal-diffuseness, potential conflict may develop over instrumental goals; and as mentioned earlier, goal conflict between an organization and its dominant environment triggers the effects of vulnerability.

Goal-diffuseness also contributes to professional insecurity. Clarity of goals is probably an important condition for the development of technical competence. Unable to reach agreement on the efficacy of particular skills, owing partly to the vagueness of goals and the problem of measuring attainment of goals, teachers lack expertise as a base of authority. We have already suggested several consequences for innovativeness that flow from quasi-professionalism.

It is also likely that the difficulty of measuring outcomes would tend to demoralize those teachers who are not equipped with considerable personal self-confidence. The effect might be to lessen motivation to try out new practices, especially those that involve considerable inconvenience in the initial stages. In other words, a sort of fatalistic attitude may set in because of the difficulty of attaining objective certainty with regard to a particular practice.

Formal coordination and control

Thus far we have virtually ignored the impact of the total organization on the emergence of innovative roles. School systems contain elaborate means for rationalizing the flow of recruits through the system -- through sequential and horizontal organization of the curriculum, through counseling, and through quality-control mechanisms that determine promotability and placement within academic strata. Further, since the clientele of schools are non-voluntary and are located within the organization, control of deviant behavior becomes an important organizational concern. And there are also mechanisms for governing and rewarding the staff, and for allocating resources throughout a large number of subdivisions. Because of all these management problems, school systems assume a bureaucratic structure with a hierarchy of offices, a division of labor with specially trained incumbents, a proliferation of rules, an elaborate record-keeping system, and so on.

We have already alluded to the effects of innovative behavior on the managerial structure of education in our discussion of quasi-professionalism, since it is partly owing to organizational requirements that teachers are unable to achieve full-fledged professional status. Thus,

they are required to use certain textbooks on certain subjects, and are allotted a specific period of time to deal with the client (which reduces discretion); they are held accountable to administrators (which reduces collegial authority); and they are required to control the client by means of formal sanctions (which lessens the importance of expertise as a basis of authority over clients and may conflict with the service orientation).* In short, the bureaucratic setting of education creates strain for the professional role, which in turn produces some of the effects already mentioned.

Organizational requirements also influence the adoption and implementation of new practices in more direct ways. Many educational innovations are designed to meet the variable needs of students -- or as educators say, to "individualize instruction." This objective is one of the core values of professionalism; but when pursued within the typical organizational structure of education, which is largely devoted to coordination and control, it is exceedingly difficult to realize. Carlson (1965) provides us with a good example. He found that teachers who were supervising programmed instruction "were actually restricting the output of the students who were proceeding at the fastest rates."

> The logic of restricting output of rapid learners is tidy and makes good sense from at least one viewpoint. Explaining the same troublesome point to five students who are encountering it concurrently is less time consuming than explaining it to the same five students as they encounter it at different times. For the teacher who complains that there is never enough time, this appears to make good sense. In fact, insistence that all students move at the same rate, which is attempted in many classrooms, can be supported by the same logic. (p. 77)

---

*See Blau and Scott (1962, pp. 244-47) for further discussion of the dilemmas arising from the confrontation of bureaucratic discipline and professionalism.

The more rapid advancement of certain students conflicts with the principle of organizational efficiency that dictates the processing of cohorts rather than of individuals. Perhaps one reason that medical practice has low productivity is due to the difficulty of treating groups, which arises from the urgency of the individual client's need. Students are not usually perceived as "emergency cases," however, and must therefore wait to be treated along with their cohort.

Fundamental changes in organizational structure, such as non-graded schools, might be required to reap the benefits of programmed instruction. And the non-graded pattern probably requires further modifications, such as the creation of teams of instructors so that information about individual pupils can be shared more rapidly. In sum, even slight departures from traditional methods of coordination and control might necessitate further organizational adjustments, thereby disrupting normal operations throughout a large sector of the school system.

Perhaps it is more usual for these adjustments to be altogether avoided, which produces negative feed-back on the original innovation, as in the case of the teachers observed by Carlson. The hesitation to make further adjustments in the organization, then, may account partly for the "watering down" of innovations that is so frequently observed.* And because the school can nevertheless point with pride to its core curriculum, its team teaching, or its programmed instruction when confronting either

---

*Nor do educational hucksters improve matters by failing to mention the implications of their inventions for other sectors of the organization. It is not surprising, therefore, that administrators are often caught unawares when an innovation begins to make waves in the placid surface of their organizational procedures.

the public or other educators (an effect of vulnerability), there is little pressure for bringing the innovation to full fruition.

To be sure, there exist relatively non-disruptive innovations, such as technological devices that chiefly supplement routine instruction; and there are even innovations that reduce organizational friction. Hayes (1966) claims that the creation of special classes for the slow-learning, neurologically impaired, and emotionally disturbed can often be traced to the desire to remove irritants from the classroom. Obviously, the organizational context may determine the adoption as well as the non-adoption of innovations. What this suggests is that a comprehensive taxonomy of innovations should make allowance for organizational consequences. But considerable research is needed before specific features of innovations can be related to organizational response.

The combination of system attributes

Although we have tended to stress the consequences for innovative roles of each of the four organizational attributes taken separately, we have occasionally referred to problems that emerge from combinations of attributes. No doubt a thoroughgoing analysis growing out of empirical work would give greater attention to the interaction of these attributes. Possibly, some of the most critical problems facing change-agents can be delineated only by consideration of these interaction-effects. For example, the combination of the need for coordination and control, on the one hand, and professionalism, on the other, produces the problem of "structural looseness" (Bidwell, 1965, pp. 975-6). The structured isolation of teachers (in classrooms) makes coordination and control in the service of innovation quite difficult (Wayland, 1967). And because "remote control"

mechanisms are necessitated (syllabi, student accounting, etc.), structural looseness creates problems of clerical overload for teachers, which aggravates their already insecure status. In addition, it permits teachers to preserve their illusion of autonomy while inroads continue to be made on their professional sovereignty.

Figure 1 summarizes our discussion in the form of a flow-chart. The diagram does not pretend to be an elegant theoretical system. Presentation in graphic form might help clarify the linkages that require research, however.

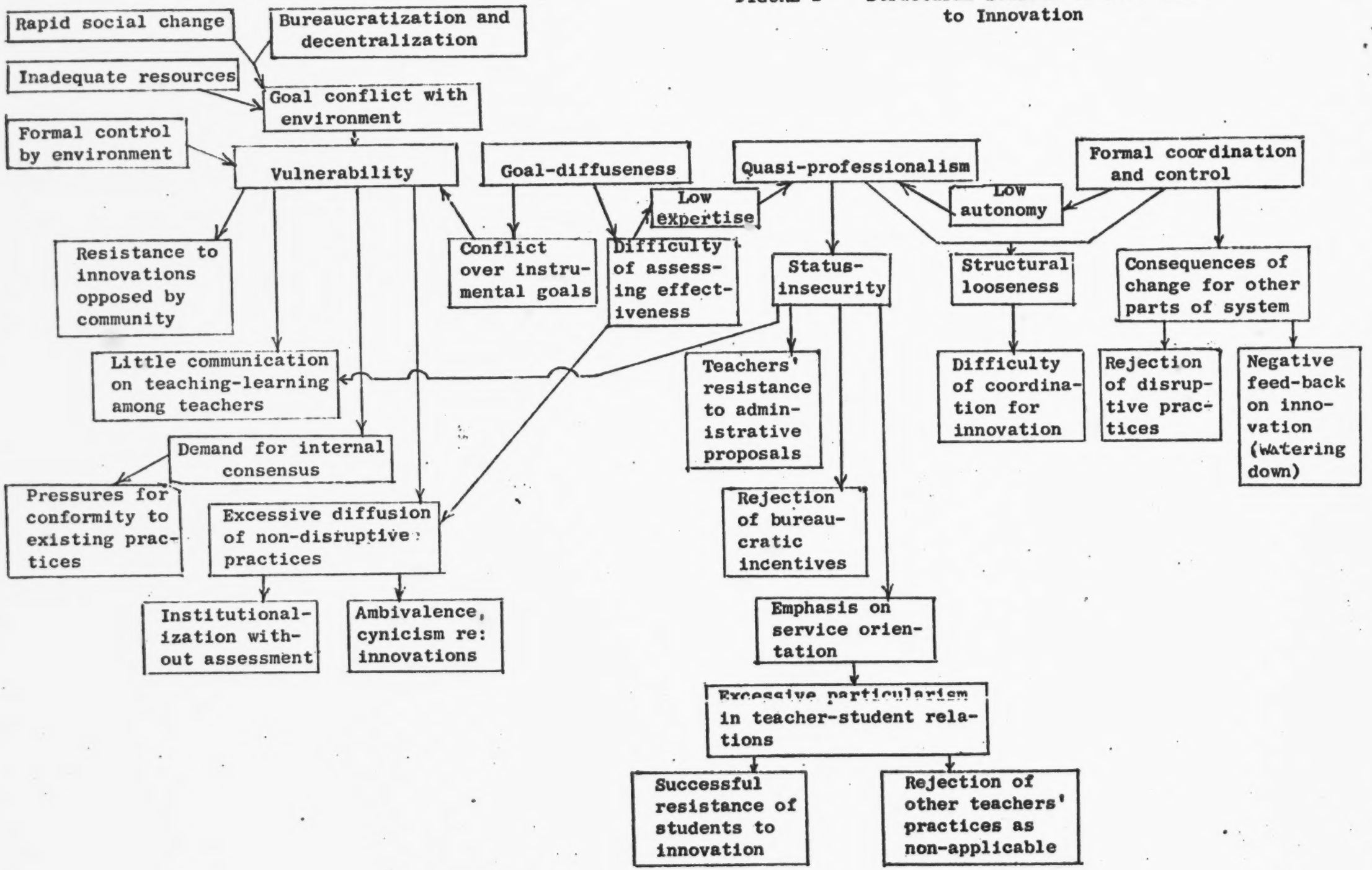
Existing and needed strategies

It seems to me that there are currently three dominant strategies for inducing change in education.* Each strategy rests upon a major assumption about the motivations of practitioners. What might be called the Rational Man strategy is founded in the assumption that practitioners are impelled by rational decision-making regarding the efficient allocation of resources to clear-cut objectives. The chief barrier to innovation is viewed as ignorance. The channels of influence that are employed by this strategy include didactic teacher preparation, research reports, and conferences -- in short, all forms of one-way communication between the change-agent and the practitioner. One-way communication is sufficient in terms of this strategy because the major need of the practitioners is for information.

---

*The following comments are distilled from an earlier paper entitled ("Images of the Practitioner and Strategies for Inducing Educational Change," (Sieber, 1967).

FIGURE 1 -- Structural Sources of Resistance to Innovation



The effort entailed in pursuing the Rational Man strategy is comparatively small and the coverage is comparatively wide; hence, the stragegy has much to recommend it. Unfortunately, the yield leaves much to be desired. What the approach overlooks is the necessity of learning about the practitioner's values and organizational circumstances by means of two-way communication, which can be achieved either by face-to-face contacts or by detailed knowledge of the typical values and circumstances of the "target-system." Essentially, the strategy of the Rational Man neglects consideration of the four attributes of the educational system that were discussed earlier.

An alternative strategy involves the participation of members of the system, and rests on the assumption that practitioners are willing and able to cooperate in new ventures. The strategy might therefore be termed the Cooperator strategy. Two-way communication is the hallmark of the strategy, and its proponents include school consultants, on-site evaluation experts, demonstrators, and human relations experts. The effort required by the strategy is greater than the effort required when addressing the Rational Man. And barring the development of a widespread system of "extension agents," the coverage is probably limited. What is lost in extensiveness may be somewhat compensated for by gains in intensiveness, however. Nevertheless, the yield of the strategy in terms of the total educational system is probably as limited as that of the Rational Man approach. One reason is that the strategy overemphasizes the personalistic aspects of the practitioner's lot, and therefore requires intensive treatment of individuals. And what is more important, insufficient attention is given to the values generated by quasi-professionalism,

and to the formal organizational attributes of vulnerability, goal-diffuseness, and coordination and control. Thus, resistance to change tends to be viewed as a matter of personal insecurity, habit-formation, or sheer lethargy, rather than of status-insecurity, peer group pressures, and bureaucratic hindrances.

A third strategy is derived from the notion that practitioners are powerless to innovate. Even assuming complete information and ability to overcome their resistances, they would still be unable to make major modifications in the structure of education. This approach might be called the strategy of the Powerless Participant. The channel of influence is provided by legal and bureaucratic channels with directives flowing downward and evidence of compliance flowing upward. The change-agents comprising the strategy represent the three branches of government at local, state, and federal levels, as well as various pressure groups at each of these levels.

The effort entailed in the Powerless Participant strategy is great; but the coverage is quite wide, for national or state action can reach into a large number of systems in a relatively short time. And on first consideration, it would appear that the yield of the strategy is great, for many innovations in schools are supported by legal or bureaucratic regulations. But these regulations are often applied to pre-existing patterns of norms; that is, they often serve mainly to standardize and spread a particular normative pattern. It is therefore difficult to know whether it was the new directive that wrought a particular change, or the gradual diffusion of a practice that was somewhat facilitated by legal action. Further, there are many reasons to suspect that administrative

directives within schools are averted, sabotaged, watered-down, and even rescinded in the face of opposition from students, teachers or the community. The consequence of quasi-professionalism and of vulnerability are often responsible for the subversion of formal directives. Also, the necessity of controlling and motivating students by non-formal means, mentioned earlier, exerts a corrosive influence on formal regulations. In sum, practitioners are by no means powerless to shape their organizational setting.

The three strategies fail because men are not wholly rational, cooperative, nor powerless. But in certain instances, they exhibit elements peculiar to each of the three patterns of behavior. What is needed, therefore, is a strategy that takes into account the conditions under which practitioners will respond to the tactics comprised in each of the three strategies. The needed strategy, in short, should have at its disposal the resources of all three strategies, and should include guidelines for their employment under particular conditions. In the paper referred to above, I call the needed approach the strategy of the Status-Occupant.

The image of practitioners as Status-Occupants assumes that they are inbedded in an intricate network of role relationships that holds its shape as a consequence of consensus on expectations (rights and obligations) and the distribution of sanctions (rewards and penalties). Efforts to change one component of this structure without consideration of other components will ordinarily result in failure. Omitting discussion of the theoretical grounds for the image of the Status-Occupant, I will touch on some features of a formal structure for innovation that might be derived from the strategy.

Overhauling is needed at both the local and national levels. Locally, the organization of schools should be revamped to stimulate and implement behavior that is professionally-oriented. For example, a teacher who wishes to become a local expert on some new development might be able to apply to the school board for special authority to try out the development. If approved, the teacher would be provided with special funds, released from routine teaching duties, and authorized to modify regulations, reallocate resources, reassign students, and dole out rewards and penalties for those under his jurisdiction for a specified period, say, four months. The role of local administrators would be restricted to facilitation and consultation. Other teachers would probably agree to this bestowal of power on one of their peers because of their desire to have the same opportunity at some later time, their resentment of administrative domination, and their respect for the change-agent's position in the informal structure of peer relations. The change-agent, therefore, would have considerable assurance that his ideas would be given a fair trial.

Some such arrangement would increase professional autonomy, serve as an incentive for innovative proposals, and enhance the expertise of teachers. In effect, the change-agent would simulate the role and authority of the teacher-principal of a small school whose effectiveness stems from his status of <u>prima inter pares</u>.

Outside the local setting it might be necessary to organize agencies that represent several national ancillary structures and that are intended to have national impact. Agencies such as these might be required to avert the problems arising from local and regional

vulnerability. A national base of operations is also necessary to draw upon structures that are themselves nation-wide in scope; and also to attract the best talent from all over the country. These agencies should not add to the profusion of staff organizations related to education, however, but should function as coordinative bodies. Thus, each agency would draw upon the resources of federal and state offices, publishing houses, accreditation agencies, universities, and the mass media, in brief, the powerful ancillary structures to which schools are so highly vulnerable.

Each national coordinating body might focus its attention on a single innovation at a time so that resources and commitments are not spread too thin and duplication of effort is avoided. The tactics of the different change-agents comprised in the three existing strategies would be combined, of course. Their efforts would entail new regulations or legislation, consultation and demonstration, summarizations of research evidence, development of new educational products, and mass communication among communities and schools. When a campaign centering on a particular innovation has been set into motion by lower level staff, the top planners at each agency could reconvene to consider their next innovative thrust.

It should be borne in mind that our two proposals for reorganization are simply by way of illustrating the implementation of a strategy that combines the tactics of the three classical strategies while at the same time overcoming their distinctive difficulties. We have tried to show that these difficulties arise from the dominant <u>organizational</u> properties of education.

Allen, Harley E., "An Analysis of the Results of the 'Time-Scale' Application to Metropolitan School Study Council Schools," New York: Unpublished Ed.D. Project, Teachers College, Columbia University, 1956.

Blau, Peter M., and Scott, Richard W., Formal Organizations: A Comparative Approach, San Francisco, Calif.: Chandler, 1962.

Brickell, Henry M., Organizing New York State for Educational Change, Albany: New York State Education Dept., 1961.

Carlson, Richard O., Adoption of Educational Innovations, Eugene, Oregon: The Center for the Advanced Study of Educational Administration, 1965.

Corwin, Ronald G., "Militant Professionalism, Initiative and Compliance in Public Education," Sociology of Education, 1965, 38, 4, Summer, 310-331.

Cronbach, Lee J., "The Role of the University in the Improvement of Education," Expanding Horizons of Knowledge About Man,

Gallup International, Inc., School Board Members' Reactions to Educational Innovations, Princeton, New Jersey, 1966.

Gordon, C. W., The Social System of the High School, Glencoe, Ill.: Free Press, 1957.

Hayes, Paul C., "On the Local School," in Planning for Educational Change, a special issue of Theory Into Practice, V, 1, February, 1966, pp. 46-50.

Jessup, Dorothy, "Problems in Education and Resistance to Change in U. S. Public Schools," Department of Sociology, Columbia University, ditto, 1967.

Kerr, Norman D., "The School Board as an Agency of Legitimation," Sociology of Education, Vol. 38, No. 1, Fall, 1964, pp. 34-59.

Lippitt, Ronald, "Roles and Processes in Curriculum Development and Change," in Strategy for Curriculum Change, Washington, D. C., Association for Supervision and Curriculum Development, 1965.

Miles, Matthew, "Some Properties of Schools as Social Systems," Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University, mimeo, 1965.

Miller, Richard I., "An Overview of Educational Change," in Perspectives on Educational Change, Richard I. Miller (ed.), New York: Appleton-Century-Crofts, 1967, pp. 1-20.

Paisley, William J., The Flow of (Behavioral) Science Information: A Review of the Research Literature, Stanford University, Institute for Communication Research, 1965.

Sieber, Sam D., "Institutional Setting," in The Role of Educational Research in Educational Change, Bloomington, Indiana: The National Institute for the Study of Educational Change, 1967.

_____ and Wilder, David E., "Teaching Styles: Parental Preferences and Professional Role Definitions," Bureau of Applied Social Research, Columbia University, mimeo, 1967.

Wayland, Sloan R., "Structural Features of American Education as Basic Factors in Innovation," in Innovation in Education, Matthew Miles (ed.), New York: Teachers College, Columbia University, 1964.

_____, "The Context of Innovation: Some Organizational Attributes of Schools," Teachers College, Columbia University, 1967.

Wiles, Kimball, "Contrasts in Strategies of Change," in Strategy for Curriculum Change, Washington, D. C.: Association for Supervision and Curriculum Development, 1965.